

WHAT IS CLAIMED IS:

1. A high-frequency integrated circuit device comprising:
a semiconductor amplification element; and
a bias circuit for applying a bias voltage to the semiconductor amplification element;

wherein a power source of the bias circuit is connected to a power source of the semiconductor amplification element via a semiconductor element such that idle current of the semiconductor amplification element can be changed in response to change of a supply voltage of the semiconductor amplification element.

2. The high-frequency integrated circuit device according to Claim 1, wherein the semiconductor element is a transistor.

3. The high-frequency integrated circuit device according to Claim 1, wherein the semiconductor element is a diode.

4. The high-frequency integrated circuit device according to Claim 1, which acts as a power amplifier circuit including a high-frequency transistor as the semiconductor amplification element;

wherein the bias circuit includes a bias generating circuit for generating a base bias of the high-frequency transistor and a temperature compensation circuit for performing temperature compensation of the bias generating circuit.